



National Science Foundation

Directorate for Mathematical and Physical Sciences

January 17, 2012

To the Division of Materials Research community

Dear Colleagues,

The NSF Division of Materials Research (DMR) invites input from members of the scientific community to the development of a vision for its instrumentation and facilities portfolio. The input window will be open from January 17, 2012 through March 5, 2012.

The Mathematical and Physical Sciences Advisory Committee has established NSF Materials 2022, a subcommittee consisting of 15 external members of the community, to help develop a vision for the facilities and instrumentation needs of the materials community in the coming decade. This group will address comments made by the DMR Committee of Visitors (2011). The subcommittee has begun to meet and seeks your input. The co-chairs are Roger Falcone of the University of California Berkeley and Matt Tirrell of the University of Chicago. A website with background information is at

http://www.nsf.gov/events/event_summ.jsp?cntn_id=122291&org=DMR

There will be a public webinar Wednesday February 8 at 3:30 – 5:00 pm Eastern Time; please see below for the registration details.

The scope of the review includes instrumentation for individuals, shared instrumentation for groups of various types and centers, through midscale instrumentation (e.g. beamlines) and major facilities.

- How can the Division of Materials Research (DMR) best utilize its resources to meet national needs in instrumentation as well as provide access to unique instrumentation capabilities through user programs at national facilities?
- What is the best way to handle acquisition of multi-user instrumentation for the materials community, including operations and maintenance, taking into account instrument acquisition programs supported by other Federal agencies?
- What are the opportunities for development of new instrumentation and facilities, taking into account existing national user facilities, NSF's mission of transformative research, as well as the international context?
- What are the needs for workforce development (including undergraduate, small, minority serving, or geographically disadvantaged institutions) in these areas? How can DMR best utilize its resources to meet these needs?

- What is the recommended course of action considering the finite budget and staffing resources of DMR?

How your input will be used:

Community input will be made available, in original form, to Materials 2022 and to NSF staff. Whatever you submit may be subject to public disclosure. Please do not include any confidential personal information (e.g. social security numbers or home email) or confidential business information.

Particularly helpful input would include: key capabilities needed for particular science goals; alternative ways to achieve desired capabilities; suggested evolution or combination of public, private, and university resources to achieve high-priority capabilities; or discussions of the effects of changes to the portfolio on the status of the workforce.

How to send your input:

If your comments can be expressed succinctly using text alone, then compose your input in the body of a plain-text Email message (the preferred method). You may send a single Word or searchable PDF document as an attachment; but if you do, provide a short executive summary in the body of the Email. With any method of submitting input, please be brief and to the point. Three pages is a reasonable upper bound. You may include a URL link to a longer document, but keep in mind that the subcommittee is not required to read it; a crisp executive summary may be more effective. *Try to make it as easy as possible for the subcommittee to read and understand your input.* Summarize the focus of your input on the subject line of the email (e.g., “midscale projects,” “instrument acquisition program,” etc.), and be more descriptive than just “comments for Materials 2022.”

Please do not send reprints of journal articles, copies of publicly available documents (cite a URL), proposals for funding, or other material not related to the questions above.

Where to send your input:

Comments can be forwarded to Materials2022@nsf.gov.

CHECKLIST

- Comments in plain text Email or a single Word or PDF attachment?
- If sending an attachment, executive summary in the Email body?
- Comments directly connected to the scope as outlined above?
- As concise as possible?
- Helpful few-word description in the subject line?
- No more than 3 pages in length?

WEBINAR

The webinar, hosted by the Materials 2022 cochairs Roger Falcone and Matt Tirrell, and DMR Director Ian Robertson, will consist of two parts:

- An overview of the Materials 2022 subcommittee and the Division of Materials Research facilities and instrumentation
- Audience question and answer session

The webinar will be hosted using WebEx online meeting software. Please note that the webinar will be recorded and made available for subsequent viewing.

Topic: Materials 2022 -- February 8th Webinar

Date: Wednesday, February 8, 2012

Time: 3:30 pm, Eastern Standard Time (New York, GMT-05:00)

To register for this meeting

1. Go to

<https://mmancusa.webex.com/mmancusa/j.php?ED=176031172&RG=1&UID=1243435932&RT=MiMxMQ%3D%3D>

2. Register for the meeting.

Once the host approves your request, you will receive a confirmation email from Paul Spyropoulos with instructions for joining the meeting. Please be advised that you will use the web link for the video and you will need a land phone line for the audio. You will receive instructions for making the phone connection at the time that you log on to the meeting. For your information, you will dial 1-888-989-4415 (toll free) or 1-517-308-9009 to be connected with the audio. You will need to state the participant passcode "DMR2022" and tell the operator your name and institution.

To view in other time zones or languages, please click the link:

<https://mmancusa.webex.com/mmancusa/j.php?ED=176031172&RG=1&UID=1243435932&ORT=MiMxMQ%3D%3D>

For assistance

1. Go to <https://mmancusa.webex.com/mmancusa/mc>

2. On the left navigation bar, click "Support".

We thank you in advance for your comments and the effort you are making to participate in this important process.

Sincerely,

Ian Robertson

Director, Division of Materials Research
U.S. National Science Foundation